

Application No.: 10/006,174

REMARKS/ARGUMENTS

Claims 1-16 have been cancelled. Claims 17, 18, and 22 have been amended. Support for these amendments can be found in the original claims and throughout the specification and more specifically i.e. in paragraphs 0010, 0054, 0064, Table 1 of page 21 and 22. No new matter has been submitted with these amendments.

Attorney's Statement of the Substance of the Interview under 37 CFR §1.1333

Applicants' attorney thanks the Examiners for a telephonic interview on November 16, 2004. Applicants' attorney, Wei Zhou, and Examiners Lori A. Clow and Marjorie Moran participated in the interview.

The rejections under 35 U.S.C. 101, 102 and 103 were discussed. Applicants' attorney argued that the claims of the present application comply with 35 U.S.C. 101 and that the prior art does not anticipated the claims. Proposed amendments to the claims to overcome the rejection under 35 U.S.C. 101 were also discussed.

Specification

Applicants hereby thank the Examiner for the withdrawal of the previous objections to the specification.

Claim rejections under 35 U.S.C. § 101 are obviated

Claims 1-8 have been rejected under 35 U.S.C. §101 as directed to a non-statutory subject matter.

Applicants respectfully disagree. However, for the purpose of expediting the issuance of claims, Applicants have cancelled claims 1-8. Therefore, Applicants respectfully submit that this rejection of Claims under 35 U.S.C § 101 is obviated by the amendment.

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Rejection under 35 U.S.C § 112 second paragraph should be withdrawn

Claims 17-24 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

Claims 17 has been rejected by the Examiner for allegedly being unclear what kinds of evidence other than sequence annotations are obtained. Applicants have amended Claims 17 to recite specific evidence from Table 1 defined in the Specification as "consensus direction, alignment strand of every sequence in the cluster, labeled strandedness for RNAs," etc. Support for this amendment can be found in Table 1 (pages 21 and 22 of the specification). Therefore, Applicants respectfully submit that the rejection is obviated by the amendment.

Claim 18 has been rejected for allegedly being unclear for failing to point out what is intended in "defining a prior probability of an hypothesis that the biological sequence having said orientation". Applicants respectfully disagree. However, to expedite the issuance of the Claims, Claim 18 has been amended to recite a system "wherein the step of determining the orientation comprises: establishing an hypothesis that the biological sequence having said orientation; estimating a prior probability of an the hypothesis that the biological sequence having said orientation; estimating a probability of the evidence assuming the hypothesis is true; and calculating a posterior probability that said hypothesis is true." Applicants wish to point out that Claim 18 is directed to a method and a system of determining sequence orientation using a Bayesian analysis of the evidence. It is well known in the art and described in great details in the Specifications (page 19 to page 21 and Figure 4) that the Bayes rule is defined by a prior, a likelihood and a posterior probability that a statement or hypothesis is true, such as ascertain whether or not an orientation is correct. In view of the above amendments and remarks, Applicants respectfully submit that the rejection of claim18 is obviated.

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In summary, in view of the above amendments and arguments, Applicants respectfully submit that this rejection of Claims 17-24 under 35 U.S.C. 112, second paragraph, should be withdrawn.

Rejection under 35 U.S.C. § 102

Applicants thank the Examiner for the withdrawal of the rejection of claims 1-3 and 17-19.

Rejection under 35 U.S.C. § 103

Applicants thank the Examiner for the withdrawal of the rejection of claims 1-8 and 17-24.

CONCLUSION

For these reasons, Applicants believe all pending claims are now in condition for allowance. If the Examiner has any questions pertaining to this application or feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5000.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account 01-0431.

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

Date: 6/7/05By 

Wei Zhou
Reg. 44,419

Customer No. 22886